

# 2024-2044 regional population, household, and employment forecast:

## Expert panel review summary

### Context

On January 30, 2024, Metro staff convened an expert panel of economists and demographers to review the preliminary regional forecast that will be part of the 2024 Urban Growth Report. This review is intended to identify areas of agreement or disagreement among experts in forecasting. The group is advisory to Metro staff. The following summary describes the topics brought forward in the forecast review, staff reasoning, as well as expert panelist views on those topics.

### Main takeaways

#### **The long-term trend of declining birth rates will lead to slower population growth rates**

Metro's forecast for slower population growth is aligned with other forecasters' assessments. Specifically, panelists agreed that declining birth rates will mean that deaths will begin to outnumber births in the next decade. That negative natural change is expected to continue after that point, and without positive net migration, the region would begin to lose population. This expected slowdown is not because of the pandemic, the ensuing 2020 recession, or because of recent out-migration from the region. It is because of demographic shifts.

Panelists believe there is considerable uncertainty around migration, but that Metro's assumption, based on historic averages is reasonable. Panelists advised Metro to be clear about this uncertainty and that high cost of living on the west coast may lead to lower net in-migration.

Panelists indicated that, while intuition supports the notion that the region may see increased migration from climate refugees drawn to the Pacific Northwest's temperate climate, there is currently no observable evidence that this is happening. Panelists did not recommend building in an add-factor for climate induced migration at this time.

#### **Employment growth will slow because of declining population growth rates**

External experts agree that population growth is inextricably tied to employment growth and that slowing population growth would lead to slowing employment growth. Both are expected to grow at 0.4 percent per year over the forecast period. This is less than historic growth rates.

Panelists felt that Metro's preliminary employment forecast looked right in total, but that it was too optimistic about the CHIPS Act and its impacts on computer and electronics manufacturing and metal fabrication. Peer reviewers indicated that the CHIPS Act will primarily prevent manufacturing job losses that would otherwise occur in the next 10 years. Longer term, they expect manufacturing employment to be flat. In response, Metro staff has adjusted the computer and electronics and metal fabrication sectors downward slightly. The result is that manufacturing employment— after an initial increase in the next five to ten years—returns (declines) to pre-pandemic levels by the end of the 20-year forecast period.

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*NOTE: graphs included in this document are ones that were discussed by the peer review panel. As such, they may differ from the eventual draft or final regional forecast because staff has made adjustments based on expert feedback.*

## Expert panelists and Metro economics staff

### Panelists

Peter Hulseman, City Economist, City of Portland

Neal Marquez, Forecast Program Manager, Portland State University Population Research Center

Ethan Sharygin, Director, Portland State University Population Research Center

Amy Vandervliet, Economist, Oregon Employment Department

### Metro economics staff

Josh Harwood, Director of Fiscal and Tax Policy

Katelyn Kelley, Economist

Dennis Yee, Economist

## Panel discussion

### **National macroeconomic conditions**

Metro staff presented data on recent national gross domestic product (GDP) as well as GDP projections from S&P Global | IHS Markit. The national outlook shows GDP returning to a slow growth trend after seeing variability during the pandemic. The national outlook does not include another recession, but instead points to a “soft landing” from a period of high inflation.

### **National population**

Metro staff presented national population growth rate forecasts which depict slowing population growth rates. By the end of the forecast period, average annual population growth rates are expected be at 0.4 percent, down from the 0.9 percent rate for the previous 30 years. Panel members suggested comparing this IHS Markit data to 2023 Census data but indicated that those data show a similar trend and forecast.

## Year % Change Total Population

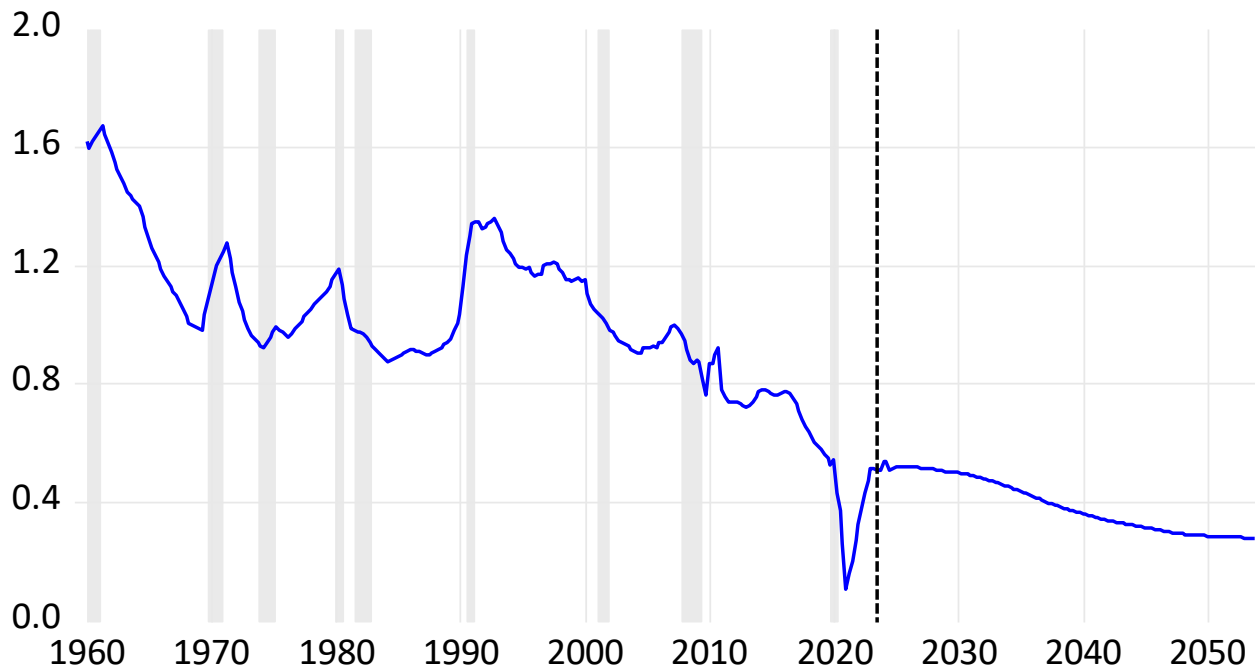


Figure 1: Annual percent change in total U.S. population (source: IHS Markit)

Declining birth rates are a main driver for slowing population growth rates. Though average life expectancy is expected to increase, the continued aging of the Baby Boomer generation will contribute to higher numbers of deaths in the next two decades. At the national level, deaths now outnumber births.

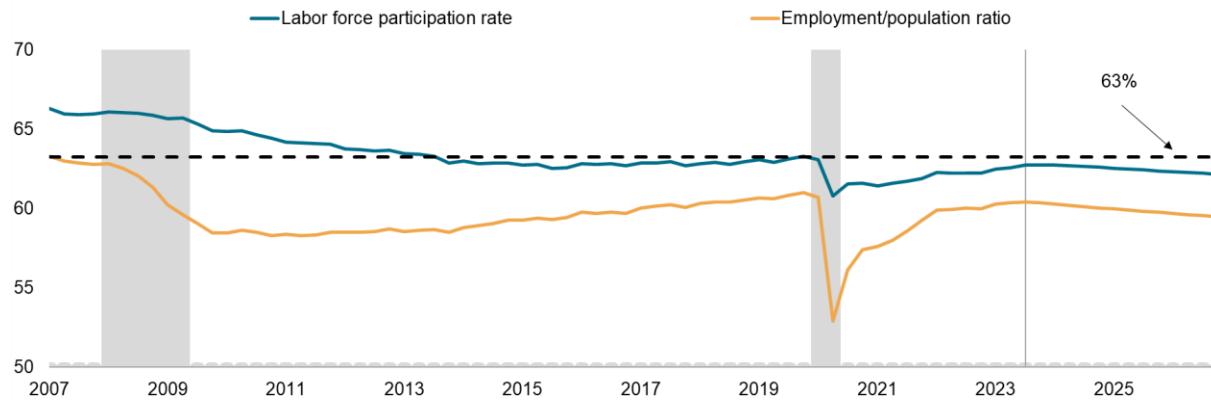
Going forward, national population would decline if it were not for international migration into the U.S. The pandemic is not seen as the cause of slower population growth. Rather, the continuation of the long-term trend of declining birth rates has become clearer since the completion of the 2018 forecast. Panelists did not indicate any disagreement with these overarching trends and their implications for regional population growth.

### National Employment

Employment growth depends on population growth and labor force participation among that population. Having presented national data on slowing population growth, staff presented information on labor force participation and employment-to-population ratios.

### Labor force participation

Percent



Data compiled Jan. 19, 2024.  
Sources: Bureau of Labor Statistics, S&P Global Market Intelligence.  
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Figure 2: U.S. labor force participation

The national employment forecast shows slowing growth rates in coming decades. IHS Markit’s national employment forecast indicates an average of 0.4 percent growth per year through the year 2055. This matches the national forecast for 0.4 percent population growth.

### US Payroll Employment

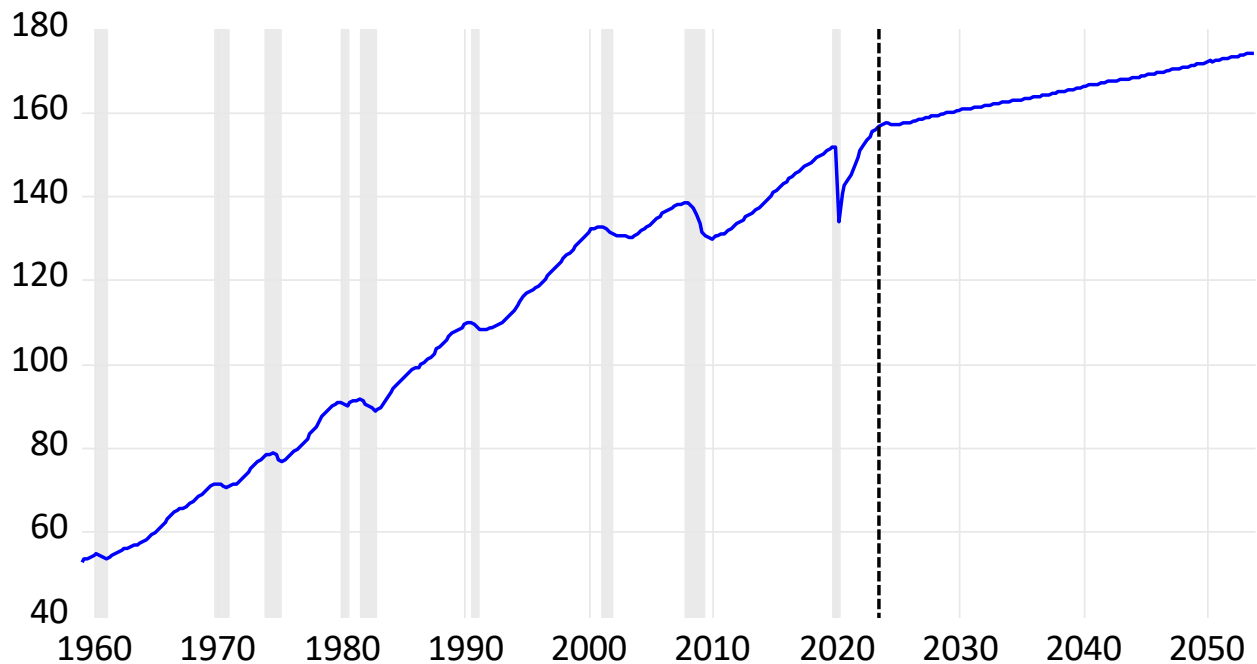


Figure 3: U.S. employment in millions (source: IHS Global Insight)

### Regional population

Switching from the national context to the seven-county Portland/Vancouver Metropolitan Statistical Area (MSA), Metro staff presented the current population pyramid for the region.

Current age distribution

Figure 4 depicts an aging population with constricted younger age cohorts. This type of population pyramid indicates that a population will have diminishing natural increase (in which deaths exceed live births) and would shrink over coming decades were it not for net increases from migration.

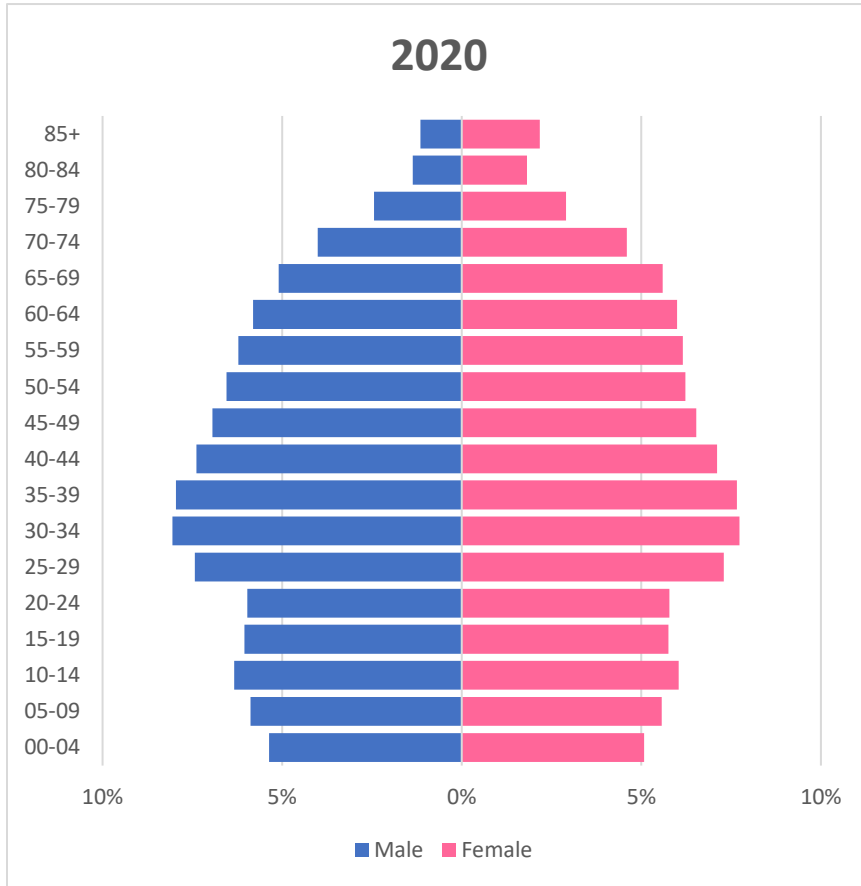


Figure 4: Portland/Vancouver MSA population pyramid in 2020 (source U.S. Census)

Panel members discussed how the regional population pyramid compares with other regions in the U.S.:

- Relative to other states, Oregon has a higher share of population that is 65 and older.
- The region continues to attract young working age migrants (ages 20-39).

Regional birth rates and fertility rates

Metro staff presented data on age-specific birth rates for the region. As depicted in Figure 5, births are being delayed until later in life and the average woman is having fewer children than in previous decades.

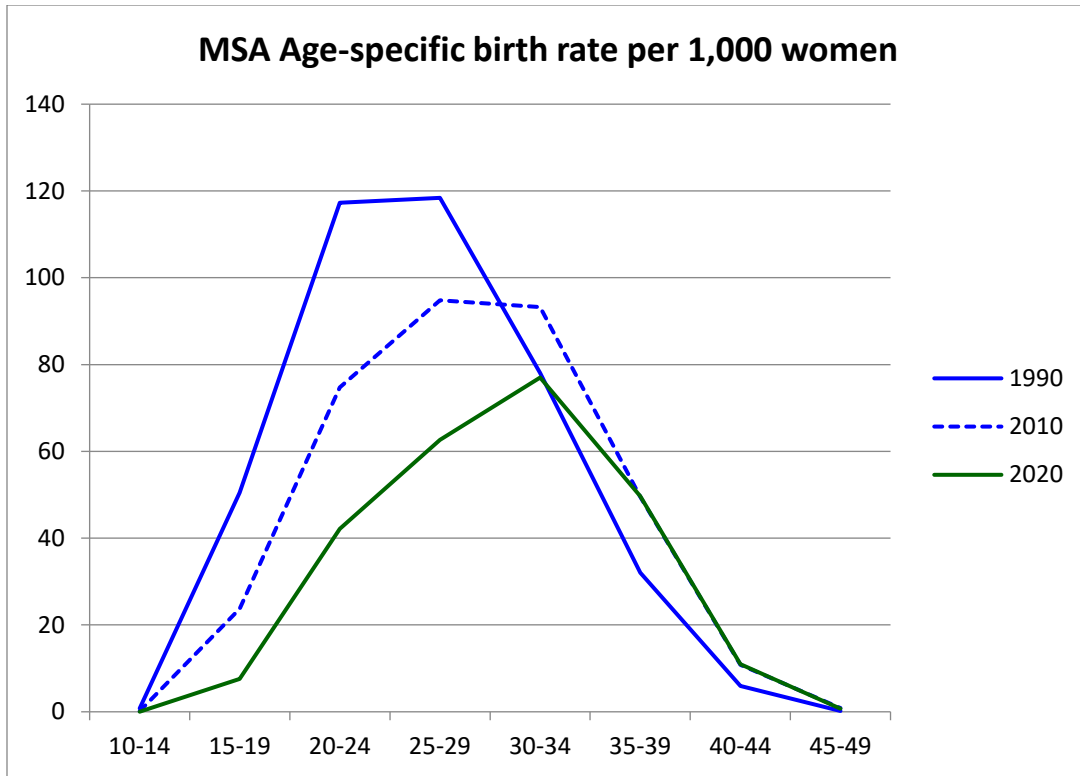


Figure 5: age-specific birth rates for the Portland MSA (source: U.S. Census)

Metro staff also presented total fertility rates for the MSA as depicted in Figure 6.

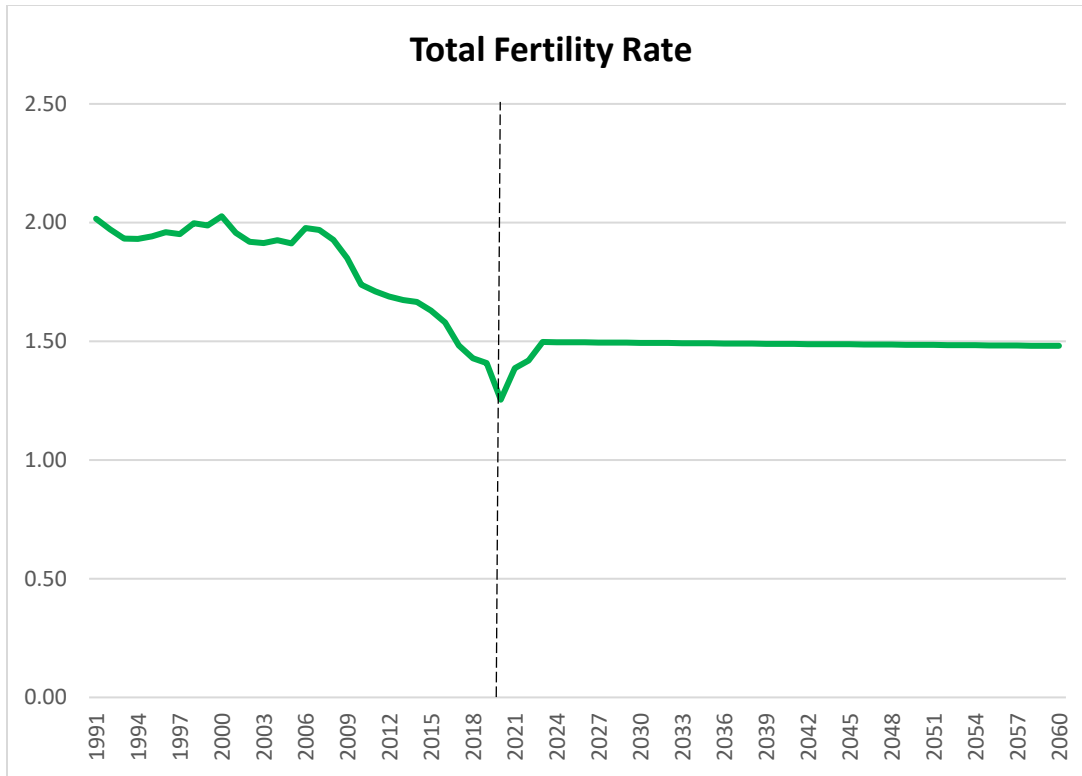


Figure 6: Portland MSA total fertility rate history and forecast (sources: PSU Population Research Center and Metro modeling)

Panelists from PSU’s Population Research Center noted that Metro’s forecast total fertility rate of 1.5 children per woman is slightly higher than PSU’s forecasts for 1.4 children per woman. Metro will retain its assumption of 1.5 for the baseline forecast but will express a low and high forecast range to account for uncertainty around this and other assumptions.

#### Regional mortality assumptions

Though average life expectancy is expected to rise, the sheer number of people in the Baby Boomer generation will result in rising numbers of deaths in the region in coming years (despite living longer on average). See Figure 7. The peak circa 2020 is because of the pandemic.

### MSA Deaths (Baseline)

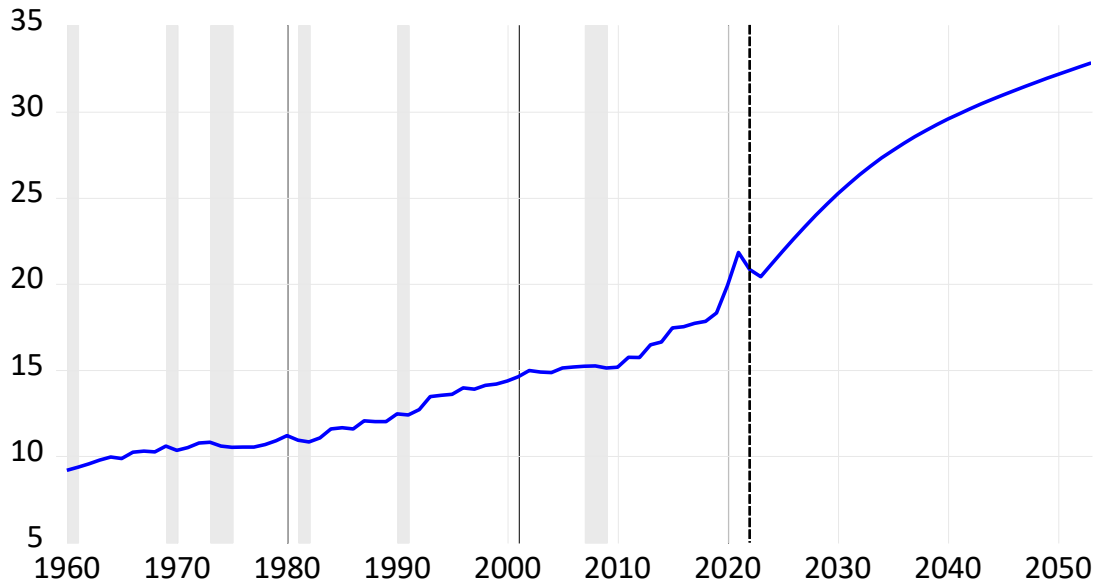


Figure 7: Annual deaths (in 1000s) for Portland MSA (Source: PSU Population Research Center)

Panel members asked whether Metro accounts for the age of people migrating in and out of the region. Metro staff indicated “yes,” that these data come from PSU and include the age of migrants.

Panelists asserted that migrants to the region tend to have better health than people born in the region and inquired whether different life expectancies are assumed for those born here vs. those that migrate here. Metro staff indicated that its forecast does not differentiate.

Panelists inquired whether the forecast includes mortality by race and ethnicity. Metro staff indicated that yes, this is calculated in a post-processor.

#### Natural change

Natural change is the net change in total population after accounting for births and deaths. As depicted in Figure 8, natural change in the region will be negative in about a decade when deaths outnumber births. The expert panel did not indicate any disagreement with these fundamental demographic trends. Negative natural change will leave net migration as the potential source of regional population growth.



### MSA Natural Change (births minus deaths)

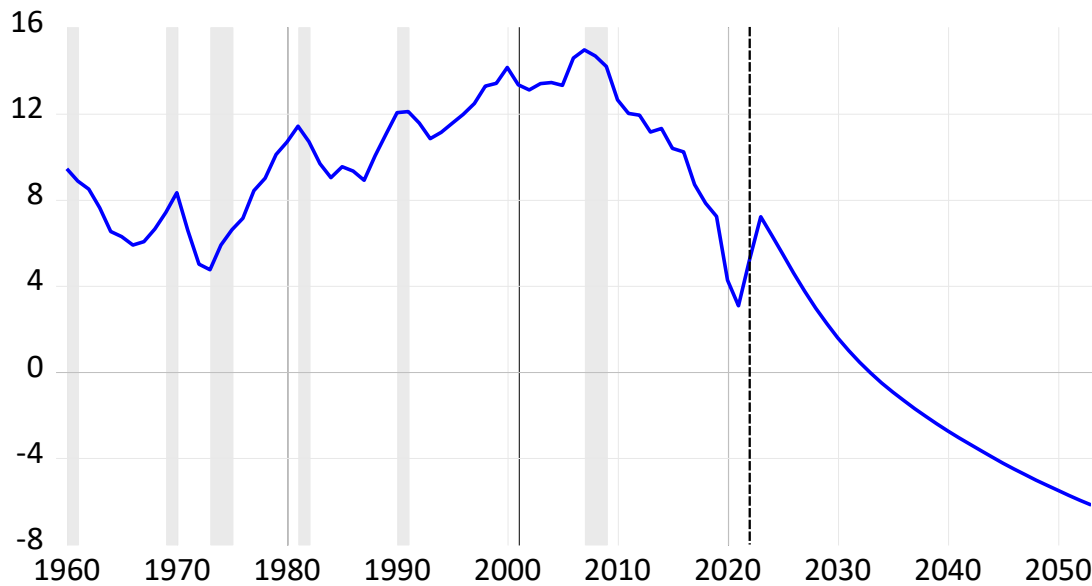


Figure 8: Natural change in the Portland MSA, 1000s of people per year (source: PSU Population Research Center)

### Regional migration

Panelists discussed how migration into and out of the region is volatile and difficult to forecast. See Figure 9.

### MSA Net Migration (Baseline)

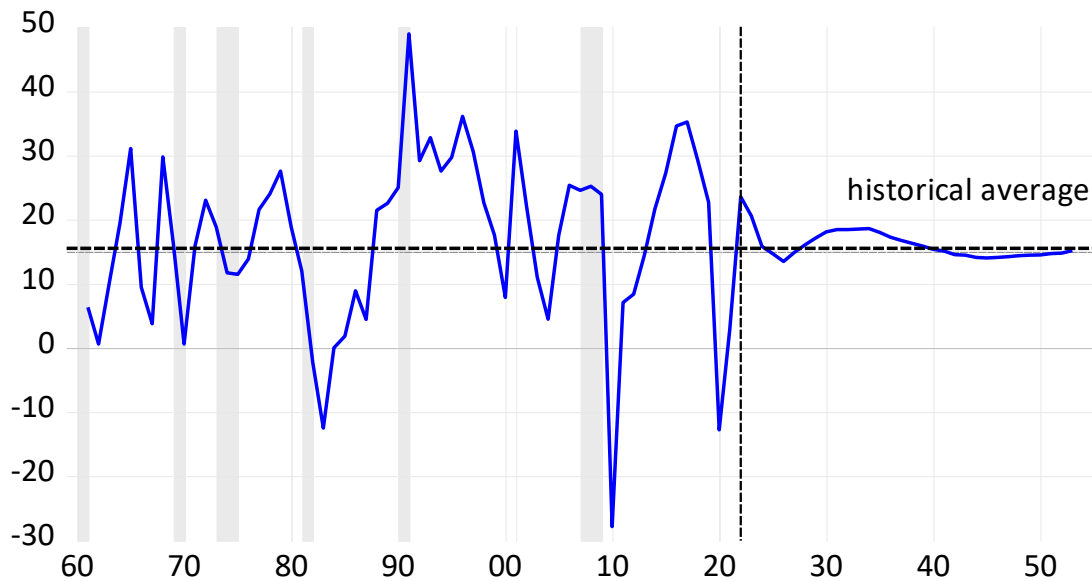


Figure 9: Portland MS net migration, 1000s per year (source: PSU Population Research Center)

Migration rates will determine regional population growth outcomes since natural increase will not be a long-term source of population growth. Panelists indicated that the persistence of remote work, quality

of life concerns in downtowns, and cost of living on the West Coast potentially reduce the relative attractiveness of the region for migration, making it more challenging to forecast than before. Panelists indicated general agreement that using the long-term historic average of about 15,000 net migrants per year into the region seemed reasonable, but that staff should be clear about the uncertainty surrounding that assumption. The State of Oregon Office of Economic Analysis has recently published an analysis of a [zero-migration scenario](#) to assess the potential impacts of diminished net migration.

Staff indicated that this uncertainty is a reason why we utilize a range forecast. The preliminary, pre-peer-review range forecast is depicted in Figure 10. Negative net migration – as factored into the low forecast – would lead to regional population losses. The baseline forecast assumes a continuation of the historic average of net regional migration. The high forecast assumes increased net migration compared to historic averages (in addition to natural increase in population).

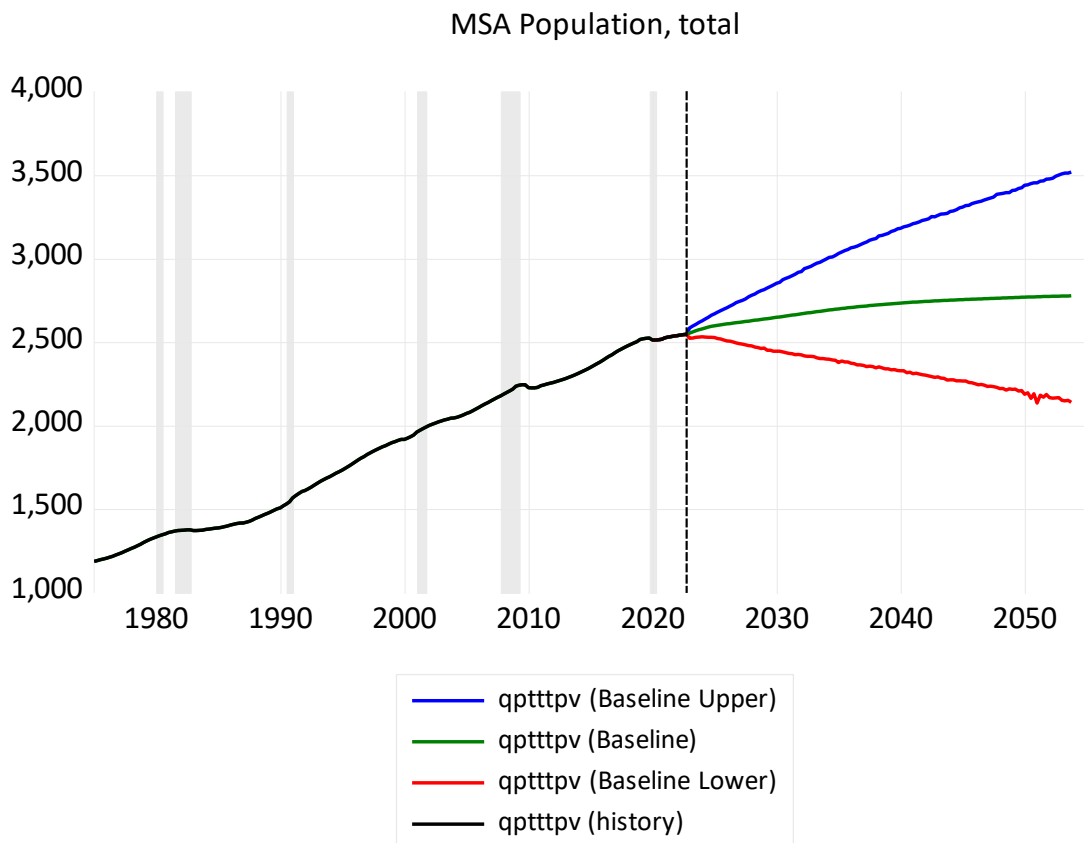


Figure 10: Portland MSA preliminary range forecast for population (in 1000s)

Housing prices and migration

Some have posited that relatively high housing costs on the west coast are one reason why migration to the region may slow down. Metro staff asked panelists a question that has been posed to them in other venues: could migration into the region be maintained by increasing housing production. The reasoning is that an increase in housing supply could moderate price increases, thereby inducing migration.

Staff’s sense is that, while increased housing production should remain a goal for the nation, state, and region, it appears unlikely that it could be achieved at a scale that would give our region an affordability advantage relative to other regions. The scale of housing production needed to give our region that

advantage would likely require that builders in the region build in a speculative fashion, beyond the point of profitability.

Panelists indicated that, under this theoretical construct of intense housing production, the type of housing that gets built would matter. Specifically, homes with more bedrooms would be needed to attract households with children to bolster population growth. Housing with this many bedrooms can be built as multifamily housing or middle housing, but in our region, it has more typically taken the form of single-family housing.

Related, household formation can happen even without population growth. For instance, a person who once lived with roommates may form their own one-person household. One and two-bedroom units accommodate those newly formed small households.

### Climate-induced migration

Staff introduced the topic of climate-induced migration, noting that many believe that our region's temperate climate could attract migrants leaving unfavorable environmental conditions elsewhere (e.g., extreme heat, sea level rise, increased storm intensity). Panelists indicated that this may be true, but that there is no data trend to indicate that this has happened yet. Panelists cited a recent consumer preference survey in which just two percent of respondents indicated that climate change influenced their decision to move. The panel does not recommend explicitly factoring it into the population forecast at this time. This recommendation is consistent with a [2016 symposium on the topic](#).

Staff suggested that households may become more sensitive to climate risk if insurance companies raise rates for property owners in more vulnerable regions. Staff intends to continue monitoring this issue in future regional forecasts. Countervailing considerations include recent extreme heat in the Pacific Northwest and the increased prevalence of wildfire smoke.

### Regional employment

Staff presented information about employment recovery from the 2020 pandemic recession. As shown in Figure 11, non-manufacturing employment in the region has fully recovered, but manufacturing employment has not (see Figure 12).

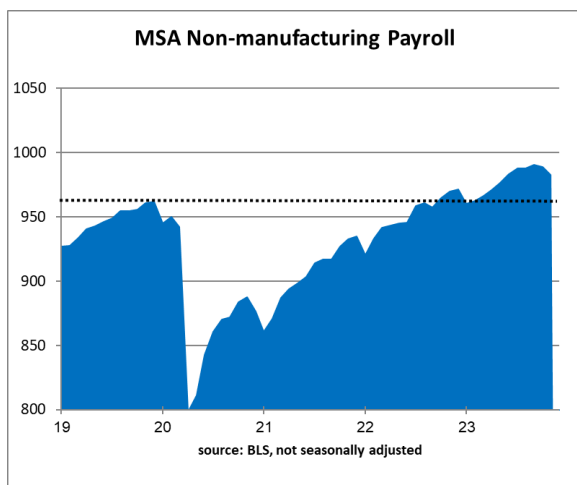


Figure 11: non-manufacturing employment in 1000s of jobs in the Portland MSA, 2019-2024 (source: Bureau of Labor Statistics)

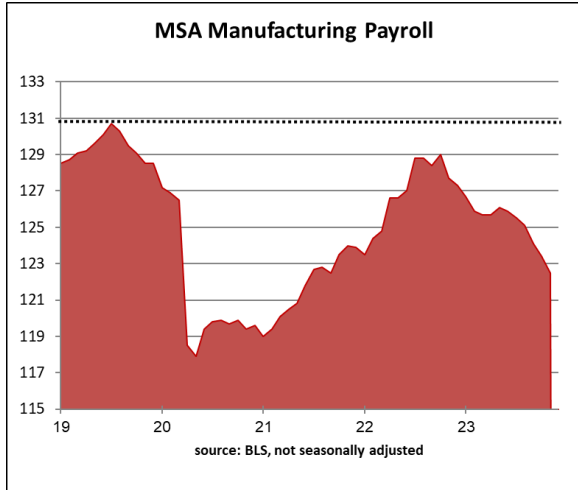


Figure 12: manufacturing employment in 1000s of jobs in the Portland MSA, 2019-2024 (source: Bureau of Labor Statistics)

Moving forward from recent history, Metro staff indicated that they believe that future employment growth rates will track closely with population growth rates, with both at 0.4 percent annual average growth. Staff presented the employment range forecast for the MSA as depicted in Figure 13.

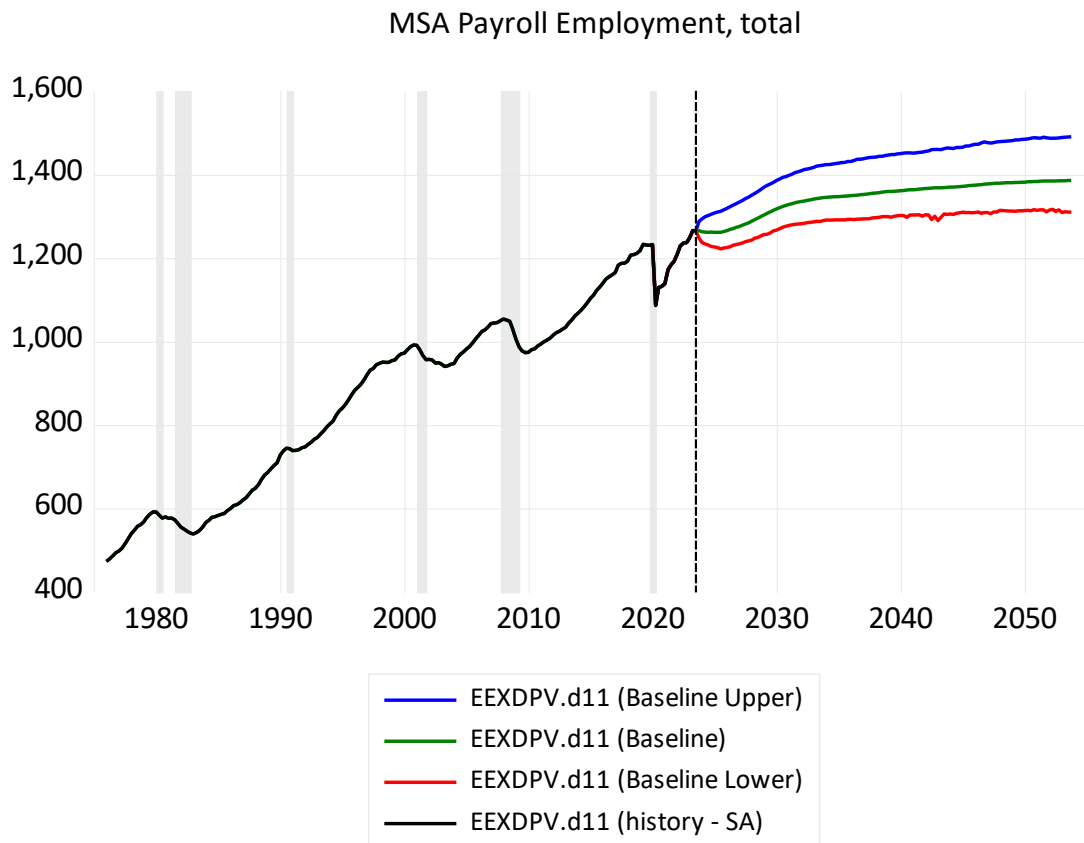


Figure 13: employment history and range forecast for the Portland MSA in 1000s of jobs

Panelists felt that Metro’s preliminary employment forecast looked right in total, but that it was too optimistic about manufacturing employment (see Figure 14 ) and the employment impacts of the CHIPS

Act on computer and electronics manufacturing and fabrication of metal sectors as depicted in Figure 15 and Figure 16.

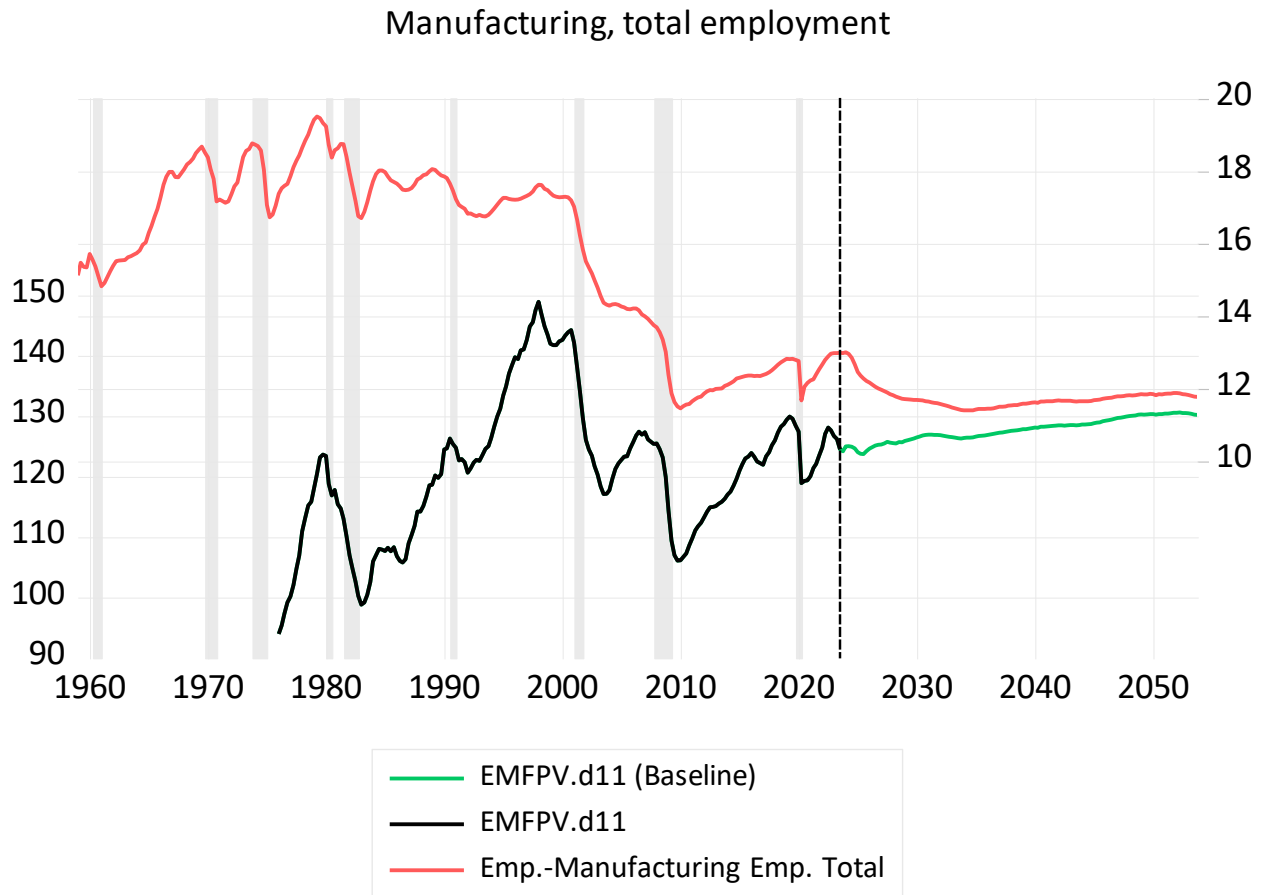


Figure 14: manufacturing employment history and forecast in 1000s of jobs for the Portland MSA (black and green lines) and the U.S. (red line)

### Computer & Electronics employment

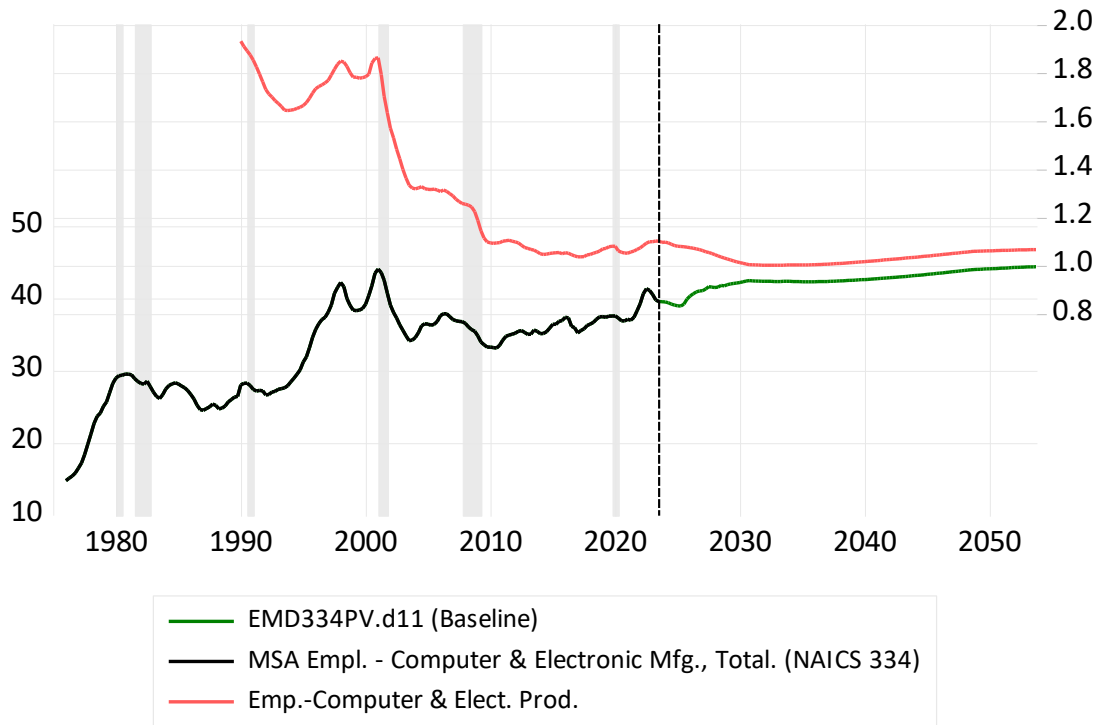


Figure 15: computer and electronics employment; red is U.S.; black is MSA history; green is MSA baseline forecast (in 1000s of jobs)

### Fabricated Metals employment

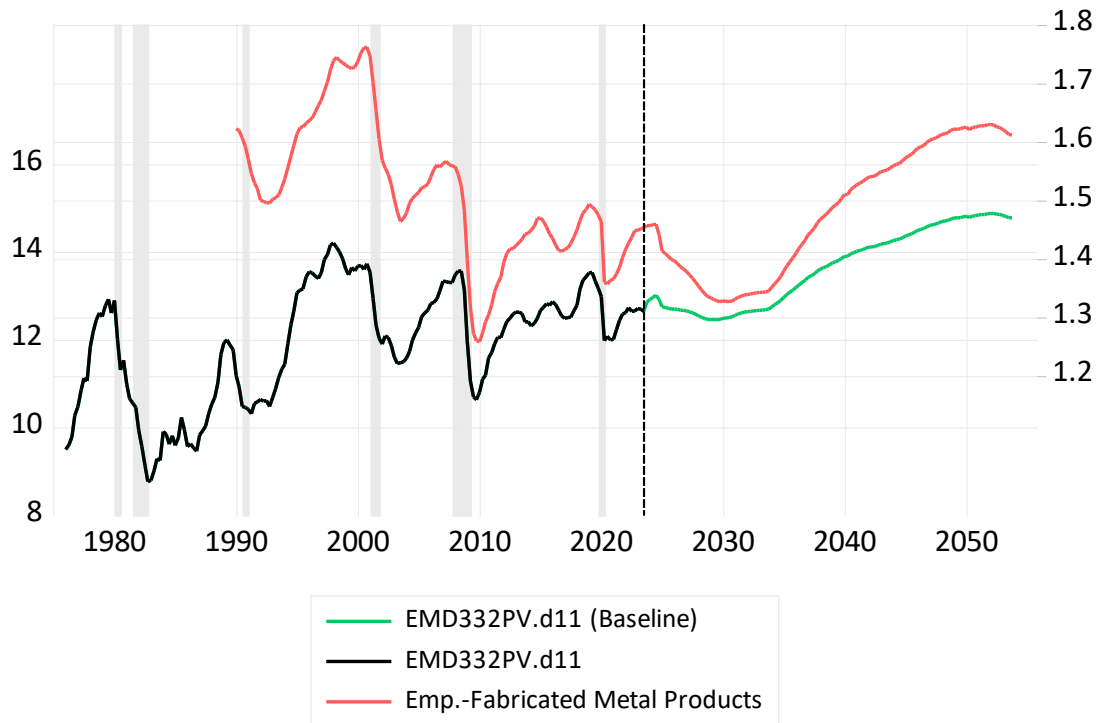


Figure 16: fabricated metals employment; red is U.S.; black is MSA history; green is MSA baseline forecast (in 1000s of jobs)

Panelists noted that Metro “would have to be really confident in the CHIPS Act” to forecast growth as shown in Figure 15 and Figure 16 and that “manufacturing does not seem like the most likely sector for employment growth.” Panelists indicated that Metro’s forecast for manufacturing carried “too much long-term momentum from the one-time shock of the CHIPS Act” and that, while there may be a short-term bump in high-tech manufacturing, it will be relatively small in the context of overall employment. In summary, panelists indicated that the CHIPS Act is best thought of as preventing manufacturing job losses that would likely otherwise occur over the next decade. Panelists further noted that the statewide forecast show a decline in metal fabrication.

Longer term (past 10 years), panelists believe there is too much uncertainty around technological changes, automation, and productivity to be confident in sustained high-tech manufacturing employment growth when the historic trend would indicate otherwise.<sup>1</sup>

In response, Metro staff will adjust the computer and electronics and metal fabrication sector forecasts downward slightly. The result is that computer and electronics manufacturing employment—after an initial increase—will be at roughly year 2022 levels by the end of the forecast period in 2044. Metal fabrication will be at roughly pre-pandemic levels by 2044.

Panelists inquired whether the first ten years or the end point (year 2044) that matters for the growth management decision. Staff indicated that the land need analysis looks at the 20-year timeframe that

<sup>1</sup> As depicted in Figure 14, today in the Portland MSA, there are about 85 percent the number of manufacturing jobs that there were in 1998.

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begins in 2024 and ends in 2044. Panelists reiterated their view that the longer-term outlook for manufacturing employment is flat at best.

Regarding other employment sectors depicted in Figure 17, panelists discussed the following, but did not indicate any disagreement:

- The high growth rate depicted in the natural resources (mining and logging) sector is because of its small size (i.e., small increases in absolute numbers result in big growth rates).
- The computer and electronic manufacturing sector is expected to grow slower (flat growth) than in the past.
- There will be a notable decline in the transportation and warehousing sector (U.S. and Portland MSA) after a decade of steep growth.
- Drivers for state and local government sector growth:
  - Slowing population growth will really impact this sector
  - However, positive tax collections and budget can drive this sector forward too
- Range forecast – in the past, the Metro Council has adopted the baseline (most likely) forecast.



<u>Industry Name by NAICS</u>	APR%:	History	ST	LT
		<u>1976-2022</u>	<u>2022-32</u>	<u>2022-45</u>
Total Nonfarm Payroll		2.1%	0.9%	0.5%
Manufacturing, total		0.6%	0.0%	0.1%
Durable MF, total		0.7%	0.0%	0.1%
Lumber products		-1.9%	-1.3%	-1.1%
Primary metals		-0.1%	-0.6%	-0.7%
Fabricated metals		0.6%	0.0%	0.6%
Machinery		0.4%	-1.5%	-0.6%
Computer & Electronics		2.1%	0.4%	0.3%
Transportation Equipment		-0.4%	-1.9%	-1.5%
Other Durable MF		0.8%	0.9%	0.5%
Non-durable MF, total		0.2%	0.0%	0.0%
Food processing		1.0%	0.0%	0.0%
Paper products		-2.1%	-1.5%	-1.4%
Other Non-durable MF		0.3%	0.1%	0.3%
Private Non-manufacturing, total		2.5%	1.0%	0.6%
Natural resources		-0.9%	4.8%	1.7%
Construction		2.9%	2.4%	1.2%
Wholesale trade		1.4%	0.5%	0.3%
Retail trade		1.5%	0.5%	0.6%
Transportation, Warehousing & Utilities		2.1%	-1.1%	-1.4%
Info - Publishing		3.5%	1.6%	0.0%
Info - Internet		0.8%	1.2%	0.4%
Finance & Insurance		1.5%	1.3%	1.1%
Real Estate		2.6%	0.4%	-0.2%
Pro., Sci., Tech. services		3.9%	0.6%	0.5%
Mgmt. of Companies		4.2%	0.8%	0.3%
Admin. & Waste Mgmt. Services		3.5%	1.4%	1.2%
Education		3.6%	1.2%	-0.1%
Health care		3.3%	1.4%	0.9%
Leisure		2.3%	3.1%	2.0%
Hospitality		2.5%	0.9%	0.3%
Other services		2.3%	1.5%	1.0%
Government, total		1.4%	1.0%	0.3%
Federal gov.		0.3%	0.4%	0.2%
State & Local gov.		1.5%	1.1%	0.4%

Figure 17: Employment growth rates by sector in the Portland MSA, history and forecast

Work from home and office vacancies

Staff presented a comparison of work from home trends in several metropolitan areas (Figure 18). Staff noted that this topic was somewhat outside of the regional forecast review scope, but that our growth management assessment will need to account for changes in demand for commercial office space. Panelists correctly noted that survey respondents may in fact be working in the office some days but reported that they primarily work remotely. Panelists also noted that work from home shares may

decrease somewhat if the labor market loosens (i.e., employers have more bargaining power over working conditions). Staff will strive to account for these considerations as they estimate commercial office demand.

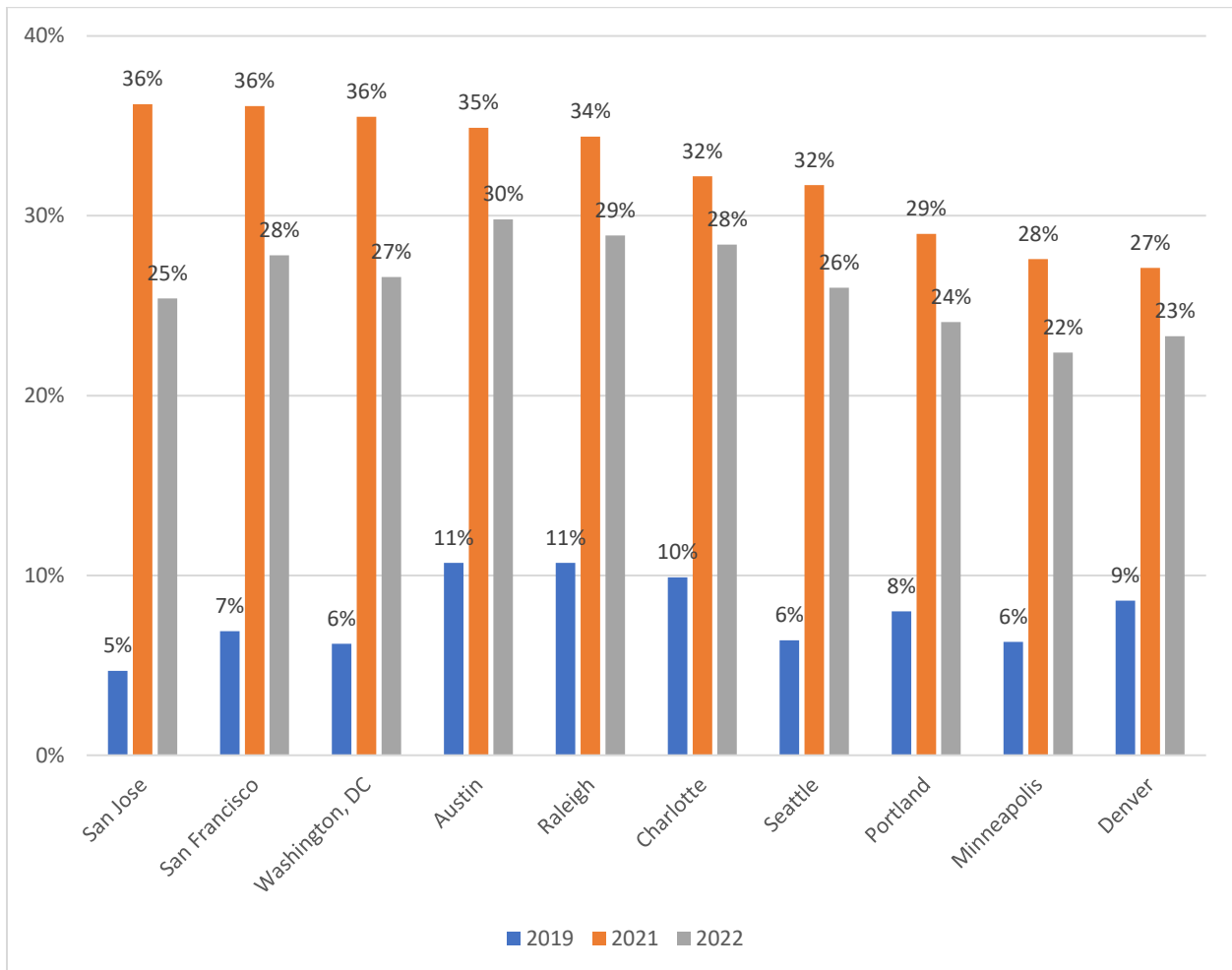


Figure 18: comparison of shares of all workers in different MSAs reporting that they primarily work from home (source ACS)

Office vacancies

As with work from home trends, staff introduced the topic of office vacancies as potentially being outside of the panels’ area of expertise. However, staff is interested in whether we need to consider office vacancies as a source of growth capacity (we have not in the past, instead focusing on vacant land or redevelopment of existing structures). Metro staff believes that vacancies will reset in the next couple years or so and will likely not be a long-term capacity consideration.